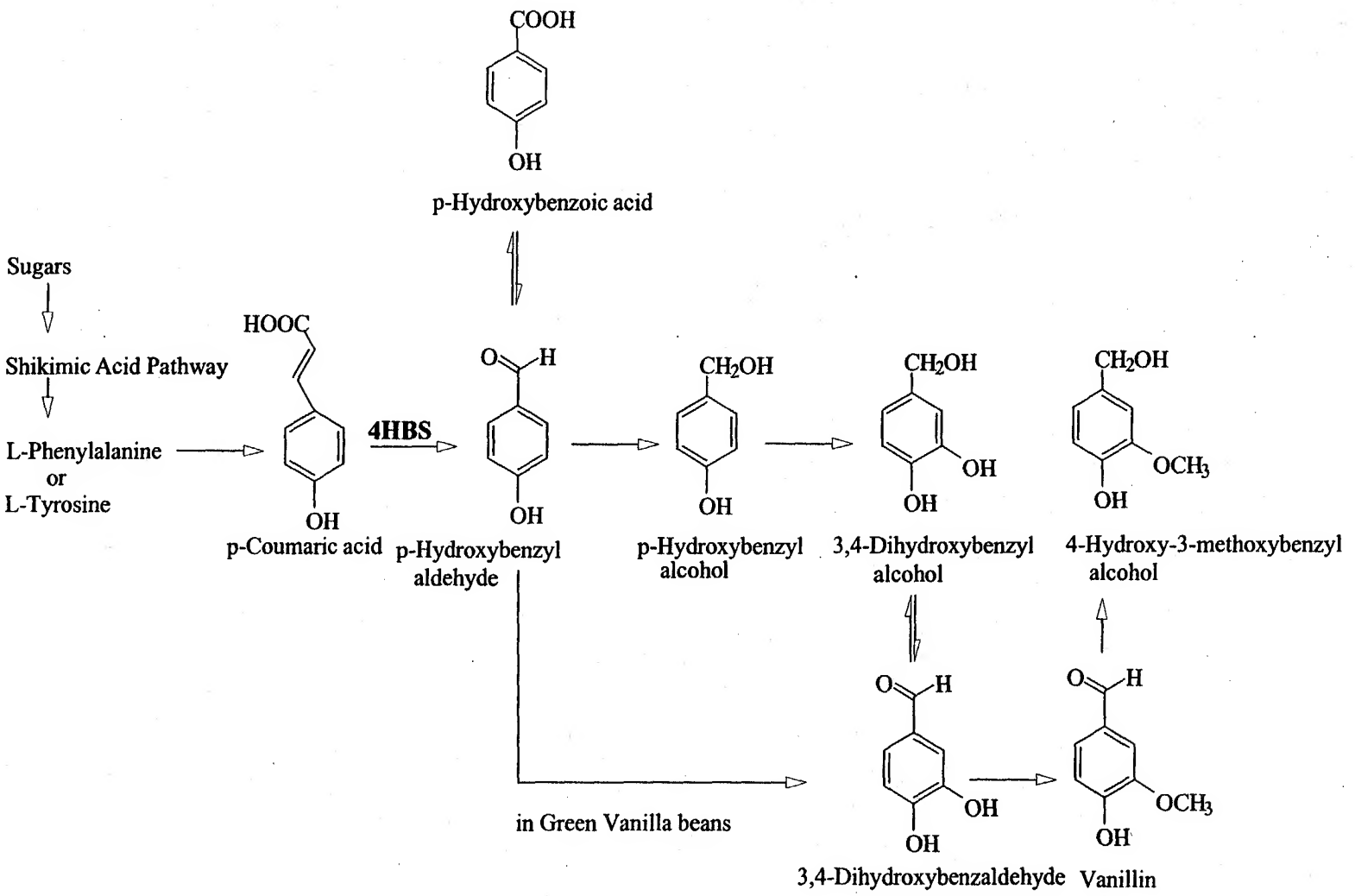


Figure 1. Proposed pathways to vanillin in cell cultures of *Vanilla planifolia*.

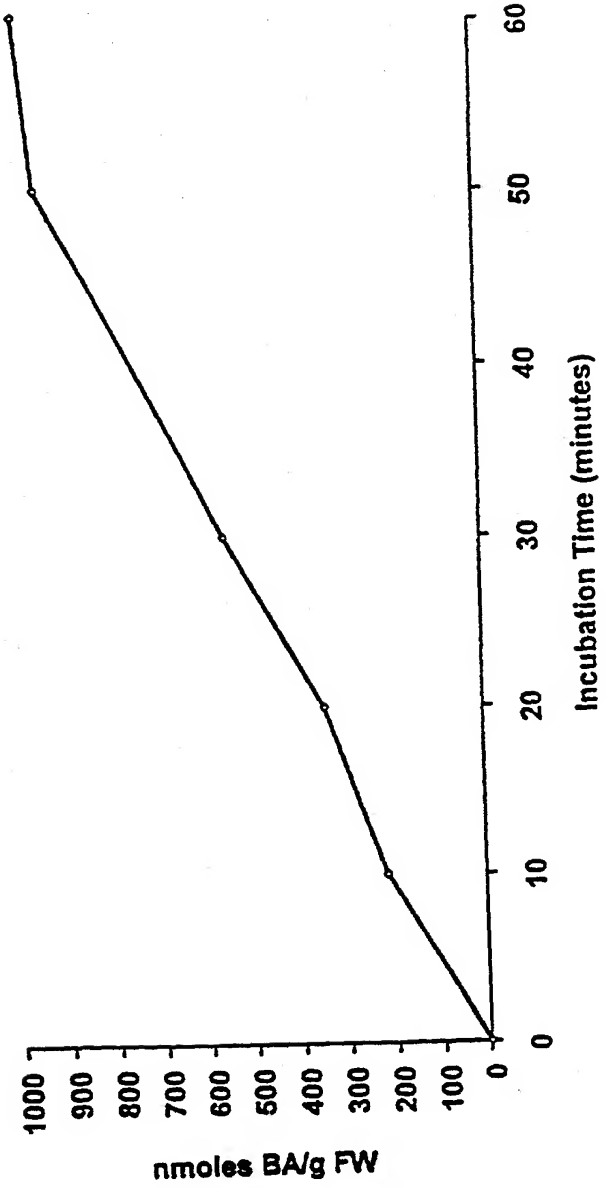


FIGURE 2

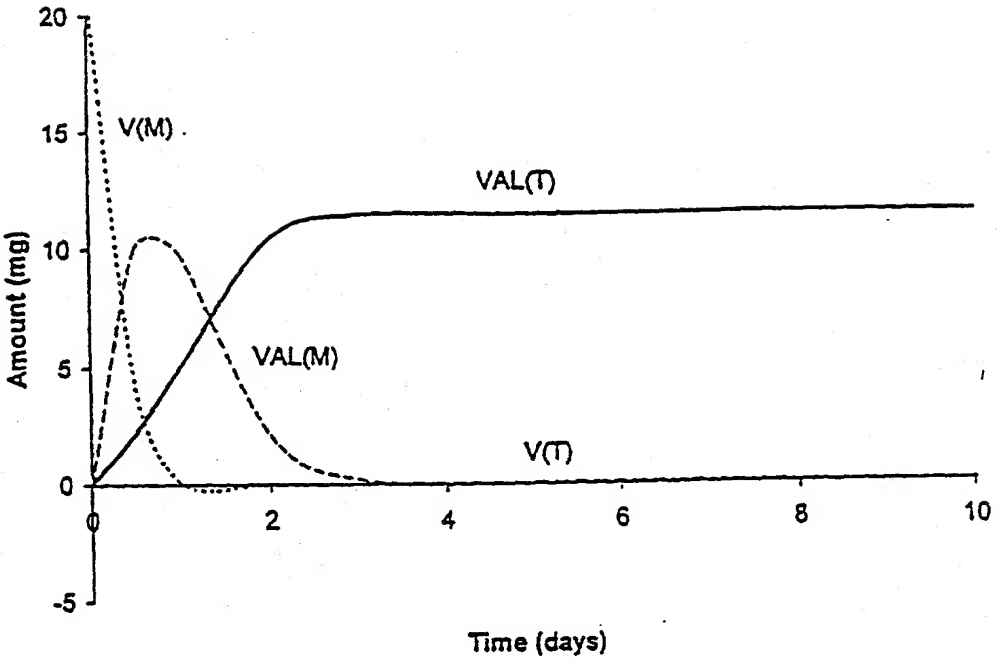


FIGURE 3

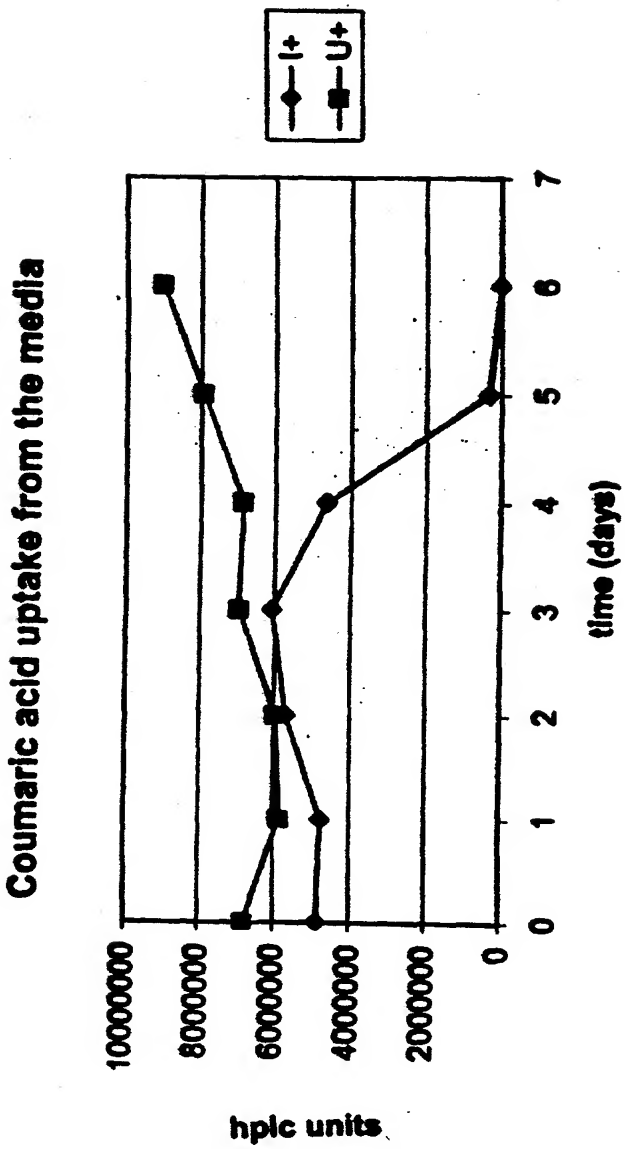

I+
U+
Coumaric acid uptake from the media
time (days)
0
1
2
3
4
5
6
7
10000000
8000000
6000000
4000000
2000000
0
hplc units

FIGURE 4

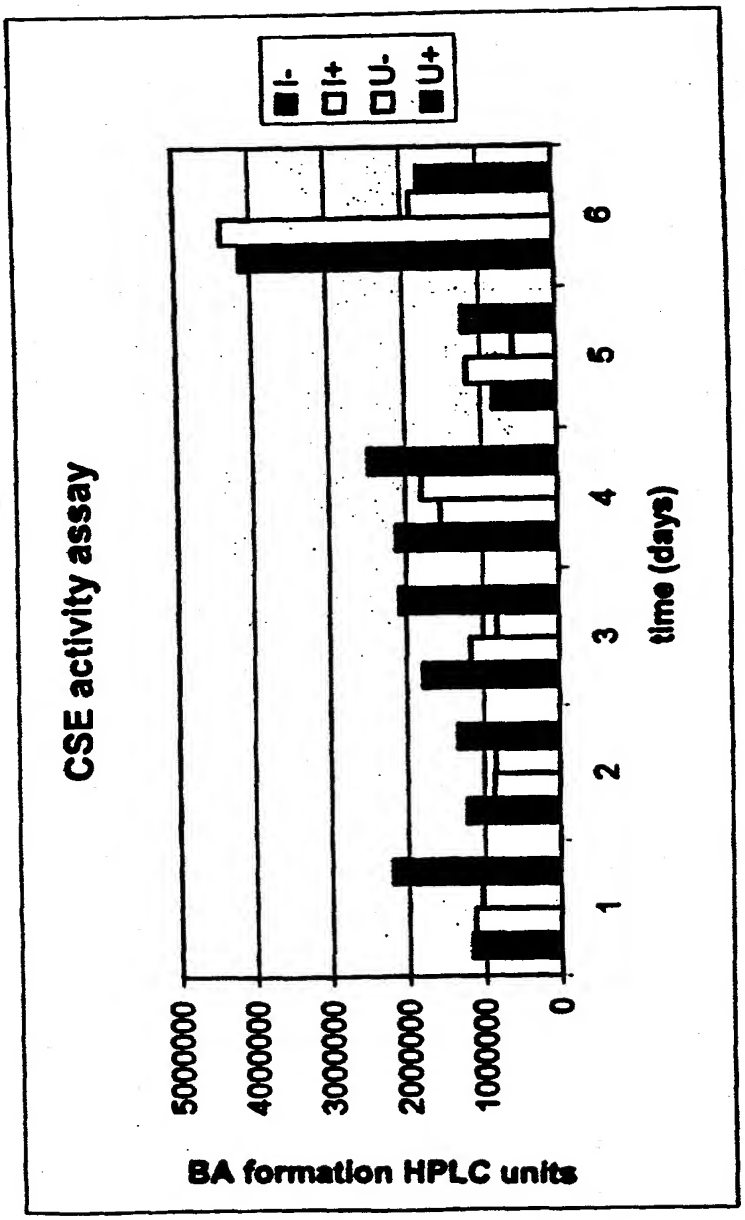


FIGURE 5

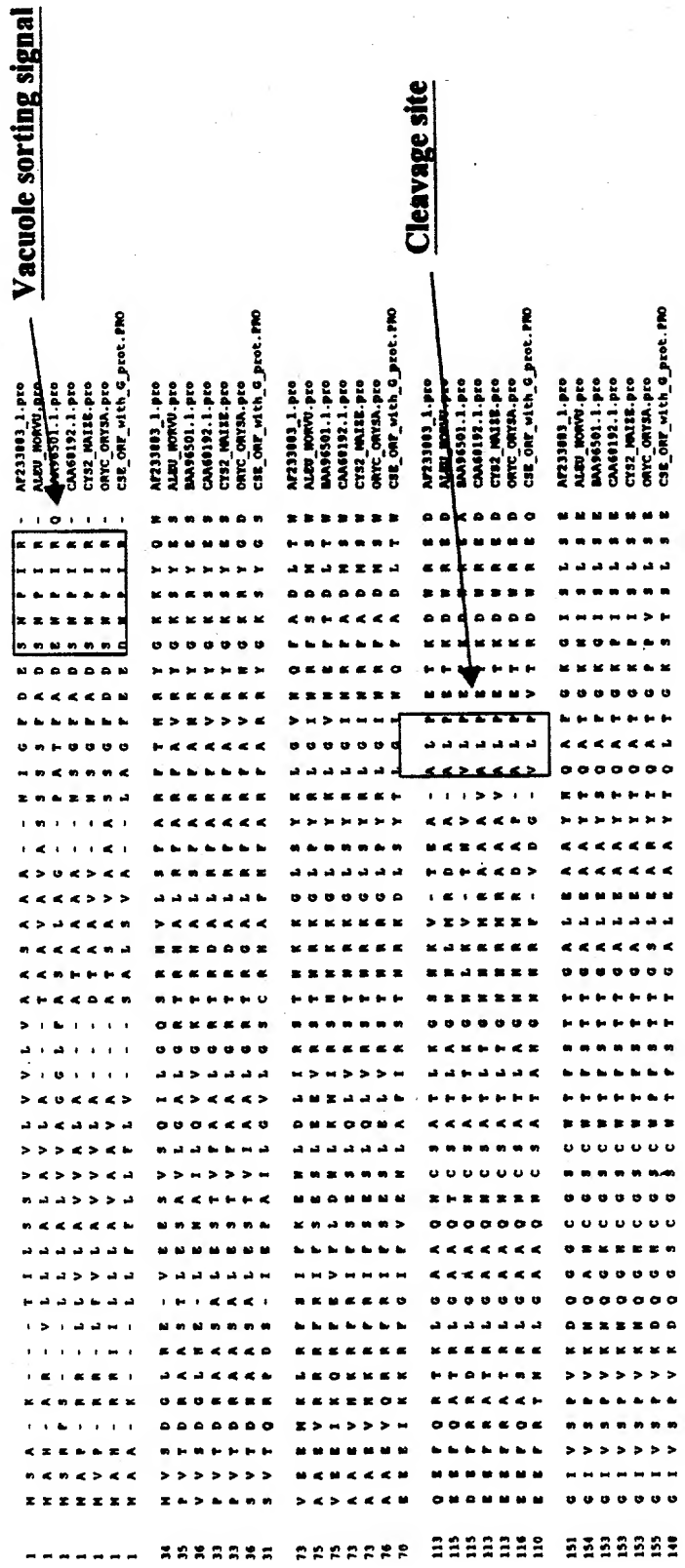


Figure 6.2

FIGURE 6b

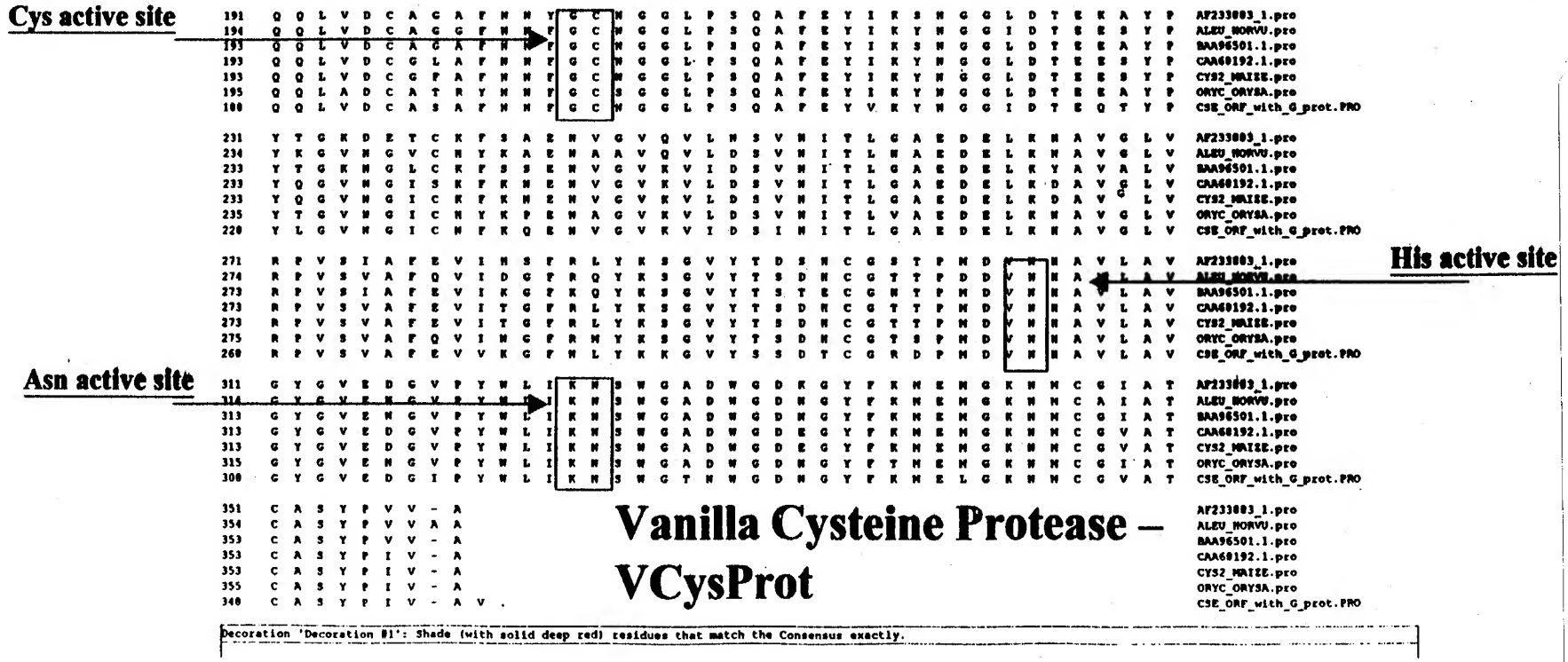


Figure 7

CSE assay with Vanilla embryo culture crude extract after immunoprecipitation

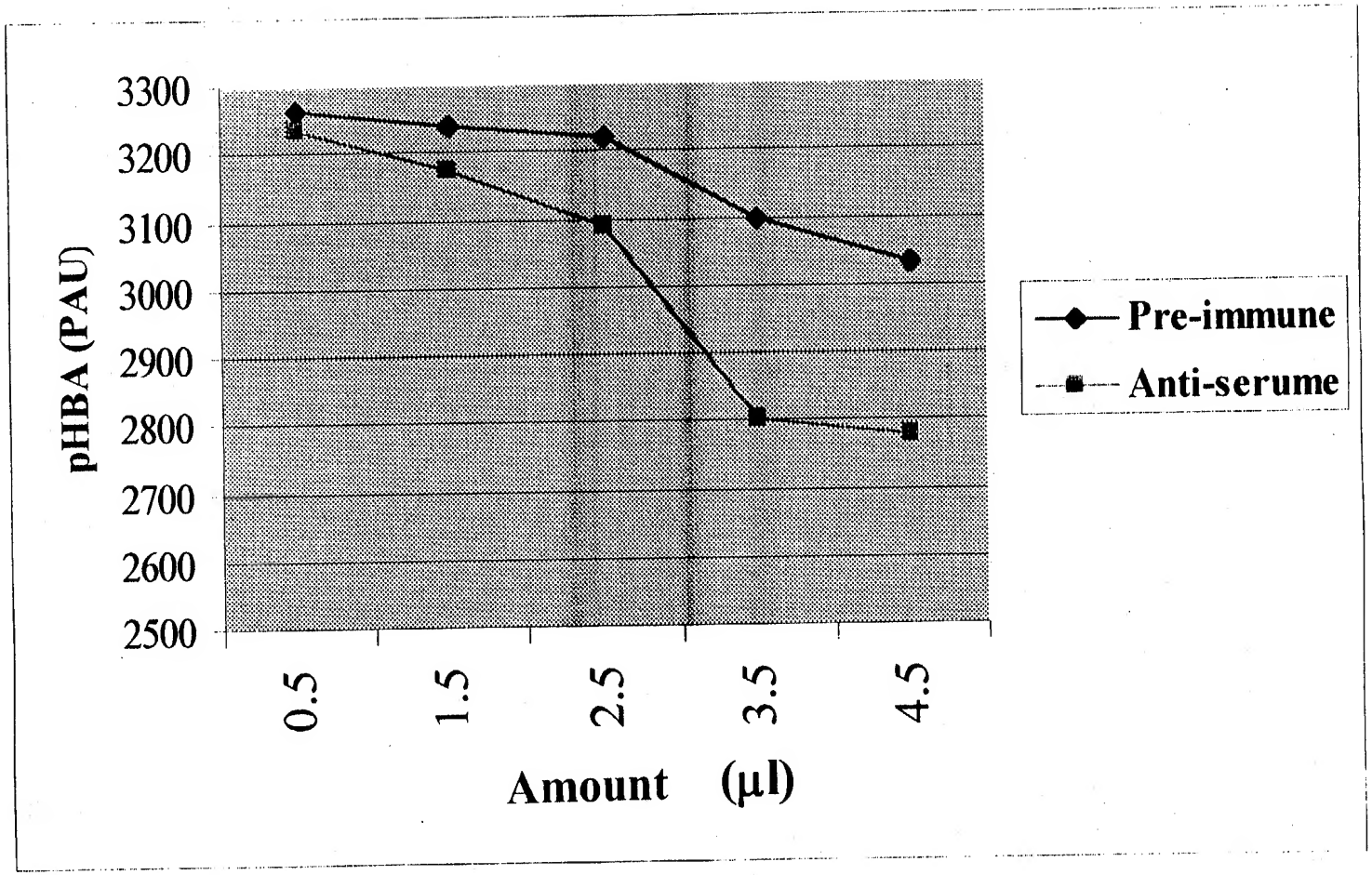


Figure 8

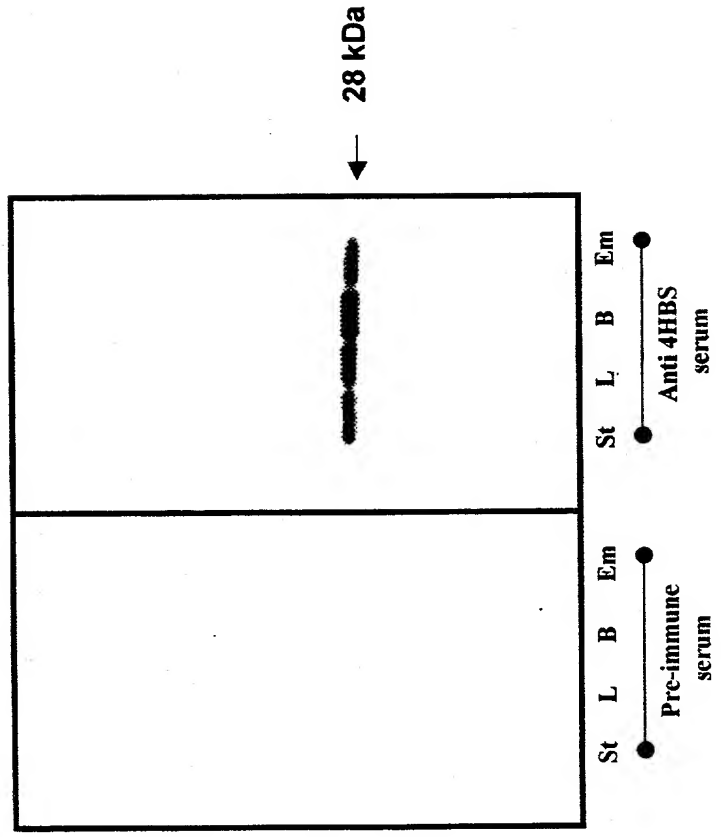
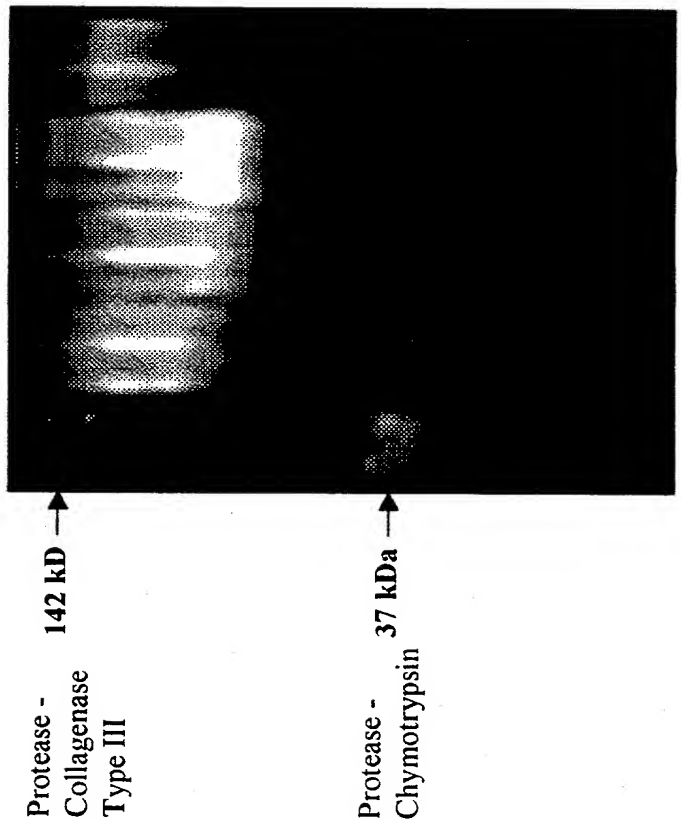


Figure 9



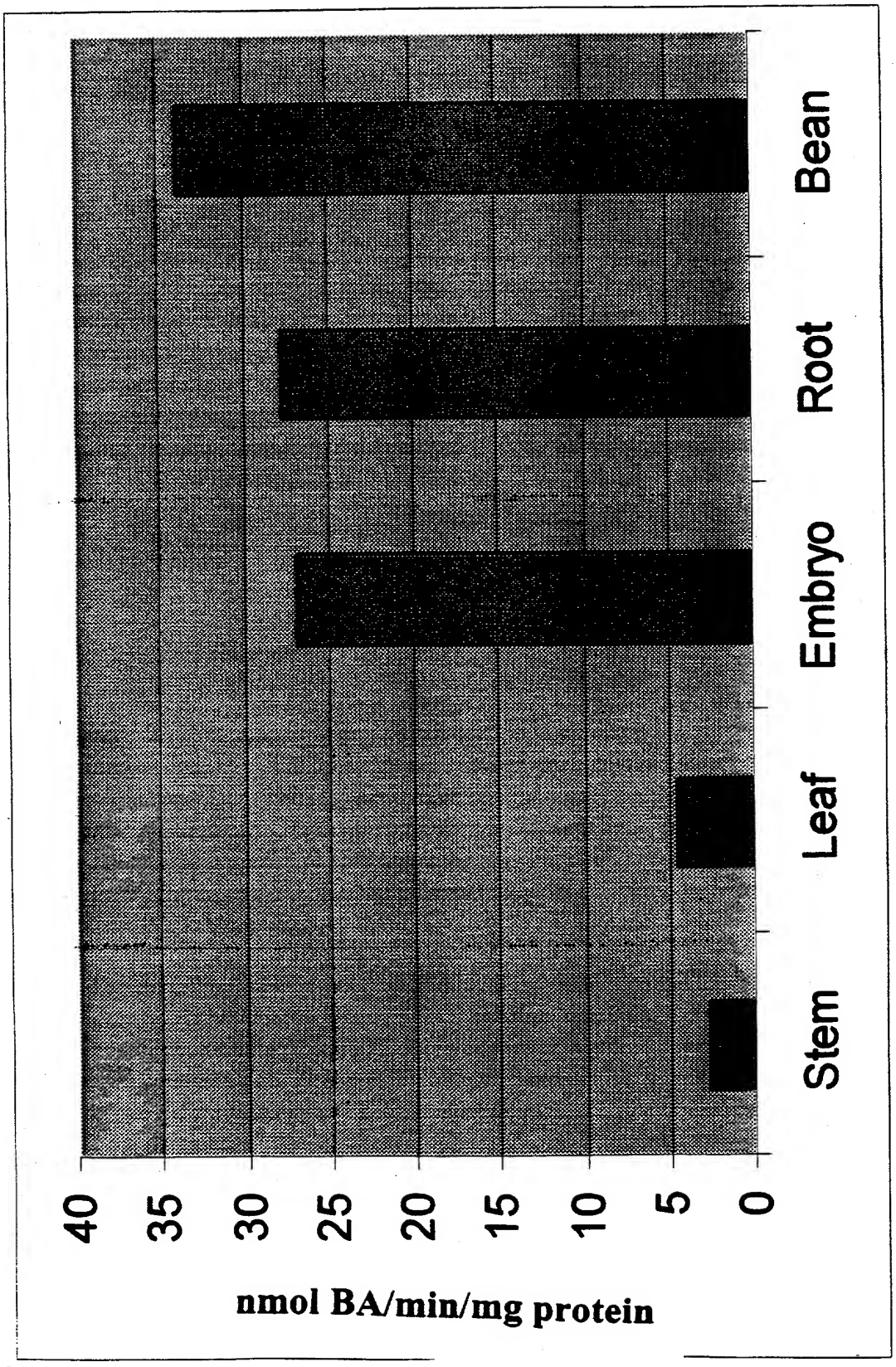

Bean
Root
Embryo
Leaf
Stem
40
35
30
25
20
15
10
5
0
nmol BA/min/mg protein

Figure 10